# Fitchburg Creek Supporter Pledge Form

## Submit completed pledge form to:

Fitchburg Public Works Department Attn: Environmental Engineer 5520 Lacy Road Fitchburg, WI 53711



Please contact the Fitchburg Environmental Engineer at 270-4262 if you have any questions on this pledge form.

1 Toperty Information	Othity Account #.		
Property Owner Name:			
Property Address:			
Phone & E-mail:			
*Impervious Surface Are	a:sq feet	Total Property Area:	Acres
owner of the subject propersubject propersubject property will follow I hereby grant the City peractivities on my property.	m, I certify that I am the erty listed above. I certify of the total 57 act	owner or authorized representative by that I am pledging that everyone ivities as checked off on the follow operty for the sole purpose of verify	on this ring pages.
Property Owner Signature		Printed Name	Date
Reviewed By		Printed Name/Title	Date

\*Impervious Surface Area - Any land cover that prevents rain or melting snow from soaking into the ground, such as roofs (including overhangs), roads, sidewalks, patios, driveways and parking lots. For purposes of Chapter 30 of the Fitchburg Municipal Code, all road, driveway or parking surfaces including gravel surfaces, shall be considered impervious, unless specifically designed to encourage infiltration and approved by the City Engineer.

## Welcome to the Fitchburg Creek Supporter Program!

The Fitchburg Creek Supporter program is a community education and action project that helps local residents and businesses do their part for clean water. Take a moment to look through this application form and learn how you can help prevent pollution to Fitchburg's waters. You may find you have already incorporated many water-friendly practices into your daily life. We hope you will find new ideas to try as well.

To be a "Fitchburg Creek Supporter", fill out this form and submit it to the Fitchburg Public Works Department. We want to know what you are already doing to protect the watershed and which new things you will try. Applicants that can demonstrate they are doing at least 34 of the 57 activities noted to protect Fitchburg's waters are eligible for a credit on their stormwater utility bill.

Join your neighbors in pledging to protect our watershed. Together we can make a difference!

The Fitchburg Creek Supporter program is sponsored by the City of Fitchburg's Stormwater Utility.

#### 1. Lawn Care

Everyone loves a green, healthy lawn. There are many ways to keep your lawn beautiful without applying harmful chemicals. The right amount of water and proper mowing are important to keep your lawn in top shape. Lawns consisting of short turf grass need no more than one inch of water every week. Too much water leads to runoff and an unhealthy lawn. Consider letting your lawn go brown and dormant during the summer dry season – it will green up when the rains return. A low growing clover (ie: Dwarf White 'Dutch' Clover – *Trifolium repens*) interseeded with your lawn will help keep it green during drought conditions and help capture nitrogen. Use 2-5 oz. per 1000 ft². If you have a shady area that you do not walk on much, 'Low-Mow' or 'No-Mow' grasses such as a mix of fine fescues (*Festuca ovina, Festuca longifolia, Festuca rubra, etc.*) may also be worth considering to reduce the need to mow your lawn.

Grass clippings fertilize the lawn, help hold moisture, and improve soil organic matter content to reduce the need for chemical fertilizers that can end up in our groundwater and our wells. Instead of bagging your clippings, leave them on the lawn, add them to your compost pile, or use them as mulch in garden beds. Grass clippings will not cause thatch build-up. Thatch is mostly roots and stem, not grass blades.

Consider using slow release natural fertilizers such as compost or corn gluten meal. Conventional fertilizers are petroleum-based products that have a high salt content. They also tend to be quick release, creating a greater risk of leaching into creeks and groundwater. Grass takes up fertilizer best in late fall.

Did you know a regular gas-powered mower emits pollutants into the air at over ten times the rate of the average car? When it comes time to buy a new mower, think about getting a mulching, electric mower – they are quiet and will finely chop your clippings. Better yet, use a hand-powered reel mower, which gives your grass the healthiest cut, has the least impact on the environment, and is great exercise too!

## I pledge to:

Mow with a non-power or electric mower to reduce fossil fuel consumption, noise, air pollution, and run-off.
Leave grass clippings on the lawn or use a mulching mower.
Compost grass clippings and other yard waste. Check <a href="http://www.city.fitchburg.wi.us/departments/cityHall/publicWorks/solidWaste/Ho">http://www.city.fitchburg.wi.us/departments/cityHall/publicWorks/solidWaste/Ho</a> <a href="mailto:meComposting.php">meComposting.php</a> for composting information.
If you need to fertilize, use natural lawn fertilizers such as compost or corn gluten meal.
Consider lawn vegetation that reduces the need to water and/or fertilize (overseed lawn with dwarf clover in sun, plant "No Mow" fine fescues in shade)
Reduce lawn size and enhance the beauty of your yard by installing a rain garden with native vegetation. Many native plants require less water and maintenance than grass and provide better stormwater capabilities as well as habitat for native insects and animals. Check <a href="https://www.danewaters.com/private/raingarden.aspx">www.danewaters.com/private/raingarden.aspx</a> and <a href="http://clean-water.uwex.edu/pubs/pdf/gardens.pdf">http://clean-water.uwex.edu/pubs/pdf/gardens.pdf</a> for information on rain gardens. Prairie plantings can also replace lawn.

#### 2. Weeds and Pests

While they may seem to be a great solution to weed and pest problems, fertilizers, insecticides, fungicides and herbicides (collectively called pesticides), often provide a short-term solution with long-term consequences. The suffix "-cide" means "to kill." Insecticides kill insects, herbicides kill plants and fungicides kill fungus species. Understanding the nutritional and environmental needs of your lawn and garden will help you maintain them without chemicals. Most diseases and insects attack plants that are already stressed by poor growing conditions. For example, plants that thrive on sunny, sandy soil are likely to be susceptible to molds and other diseases when planted in shady, moist areas. Healthy plants well suited to their environment are the best prevention against pest and weed damage.

Avoid "weed and feed" products that spread chemicals over a large area instead of targeting specific weeds. These products also apply a heavy dose of quick-release fertilizer that your lawn oftentimes doesn't need. All pesticides can be harmful to the health of your family and pets by increasing exposure to toxic chemicals. Pesticides can also kill earthworms and other soil organisms that are beneficial to your lawn.

A healthy, fluffy soil high in organic matter is the best prevention for insect and disease problems. Regular soil aeration helps maintain soil tilth and create a good environment for beneficial microbes and earthworms. Core aerate your lawn once a year in the fall or early spring. Then overseed to create a dense lawn that shades out weeds. Corn gluten meal is a natural product that fertilizes lawns and prevents weed seedlings from growing.

Check <a href="http://clean-water.uwex.edu/pubs/">http://clean-water.uwex.edu/pubs/</a> for more information on yard and garden care recommendations.

#### I pledge to:

a.	Accept a few weeds, even clover which adds nitrogen to the soil.
b.	Target invasive and/or noxious weeds with hand-weeding or spot spraying.
C.	Avoid conventional "weed and feed" products and replace with corn gluten meal if necessary.
d.	Re-seed thin lawn areas to crowd out weeds.
e.	Read herbicide and pesticide labels and follow application directions. Never apply more than the recommended amount.
f.	Pick harmful insects off plants or spray them off with water.
g.	Keep pesticides away from surface water and wellhead protection areas.

## 3. Sanitary Sewage Savvy

Well-designed and maintained sanitary sewage systems can provide years of reliable service. Poorly located or neglected septic systems threaten rivers and groundwater with nutrient and bacteria pollution. Chemical drain cleaners, solvents, and some cleaning products can kill the beneficial bacteria that make sanitary sewage treatment systems function efficiently. When systems fail, property damage, water pollution, and disease outbreaks can occur. To keep your sanitary sewage system healthy, try biodegradable cleaning products; invest in a "drain snake" to clear clogs, and consider using one of the natural bacteria based septic system maintenance products. Check <a href="https://www.Septicremedy.com">www.BioSafeOne.com</a> for more information.

Be sure to dispose of hazardous products at the Dane County CleanSweep Facility, 7102 US Hwy 12, Madison WI 53718 (Beltline/12/18 East toward Cambridge) across from the Yahara Hills Golf Course at the Dane County Landfill. The facility is open year round. Call 838-9555 or check <a href="https://www.danecountycleansweep.com">www.danecountycleansweep.com</a> for more information.

## I pledge to:

a.	Install water-saving devices to reduce demand on the system.
b.	Use biodegradable soaps and alternatives to hazardous cleaning compounds.
C.	Never put refuse down the drain or in toilets. Oil, grease, plastics, paper towels and cigarettes can clog the sanitary sewer system.
d.	Work with local regulatory agencies on incorporating re-use of grey-water or treated wastewater effluent to recharge the groundwater table.
e.	Never flush unused medications down the toilet. Take these to scheduled Dane County MedDrop collection events. See <a href="https://www.safercommunity.net/meddrop.php">www.safercommunity.net/meddrop.php</a> for more information.
f.	Have my septic tank pumped as needed (every 3 – 5 years) to prevent sludge and scum from overflowing.*
g.	Avoid chemical based septic system cleaners and additives. I will only use natural, bacteria based septic system remedies.*
h.	Watch for signs of septic system failure, such as standing water or foul odors in the drainfield, patches of lush growth, and backed up toilets or drains.*

\*(Note: applies specifically to residents on private septic systems).

## 4. In the Home: Tips on Toxics

Many household products contain hazardous ingredients. If improperly handled, they may end up in our local creeks, wetlands, marshes, lakes, or groundwater. Small amounts of toxins from many homes can build up and cause big problems. When choosing a product, take a moment to read the label. Key words can alert us to the hazardous nature of products. "Danger" "Caution" and "Warning" signify products that are potentially dangerous to the environment and animals, including humans. If you choose to use a hazardous product, use the least toxic substance, buy only what you need, and use it up or dispose of it properly.

I pledge to use:

a. All purpose cleaner – mix 1 cup of vinegar in a pail of water.
b. Bathtub/sink cleaner – sprinkle baking soda, scrub, and rinse.
c. Drain cleaner – pour ½ cup of borax in drain followed by 2 cups of boiling water.
d. Laundry soap – use phosphate-free soaps.
e. Oven cleaner – mix 2 teaspoons borax and 2 tablespoons liquid soap in a spray bottle of warm water. Spray on and clean after 20 minutes.
f. Toilet cleaner – scrub with a solution of ½ cup borax in 1-gallon water.
g. Window cleaner – mix 1 part vinegar to every 4 parts water.

For disposal of hazardous products, such as household cleaners, pesticides, oil paints, and solvents, take them to:

Dane County Clean Sweep Facility

7102 US Hwy 12

Madison, WI 53718

at the Dane County Landfill (beltline/12/18 East toward Cambridge), across from the Yahara Hills Golf Course. The facility is open year round. Call 838-9555 or check <a href="https://www.danecountycleansweep.com">www.danecountycleansweep.com</a> for more information.

#### 5. Pets and Animals

Animal waste is a serious water quality problem that is often overlooked. While there have always been animals, it was not until humans and their pets and farm animals concentrated populations along waterways that animal waste became a real problem. Waste from dogs, cats, horses, and waterfowl may contain disease-causing organisms that are harmful to both humans and animals. Animal waste also contains nutrients that encourage weed and algae growth in creeks and lakes. Large animals, such as horses, sheep, cattle, and goats can trample creekside vegetation and disturb fish spawning beds. Responsible large animal owners fence their animals away from creeks and lakes and manage manure so that it does not run off with rainwater.

Did you know that dogs are not the only problem? Cat waste is also a significant contributor of fecal matter in urban watersheds. Encourage your cat to use a litter box inside and out. Keep it clean so that the cat will prefer it to the garden. Dispose of the waste in the trash.

## I pledge to:

a. Carry a bag and clean up after my pet when out walking and in the yard. I will either put it in a plastic bag in the refuse or give it a flush.
b. Encourage my cat to use a litter box by keeping it clean. I'll dispose of the waste in the refuse rather than the yard or garden.
c. Fence my animals out of creeks, ponds, wetlands, and marshes.
d. Keep manure away from creeks, ponds, wetlands, marshes, and groundwater.
e. Never feed ducks and geese. They will be healthier without my breadcrumbs and will not be encouraged to concentrate in one area where their waste would also be concentrated.

Check <a href="http://www.myfairlakes.com/animalWaste.aspx">http://www.myfairlakes.com/animalWaste.aspx</a> for information on waste from household pets, ducks, and geese. Check <a href="http://www.countyofdane.com/lwrd/landconservation/manure.aspx">http://www.countyofdane.com/lwrd/landconservation/manure.aspx</a> for more information on managing farm animals and manure.

#### 6. On the Road

Automobiles are one of the largest sources of water pollution. Cars leak oil, antifreeze, and other fluids that are washed into waterways. Their exhaust also releases chemicals, particulates, metals, and other compounds into the air and onto the ground. When these products get into creeks or wetlands they are harmful to plants, fish, wildlife, and humans.

So each time you get in the car, remember the impacts and consider an alternative to driving. Driving less often and owning an efficient and well maintained car saves money and resources and helps protect the environment.

#### I pledge to:

blodge to:			
a.	Wash cars at a commercial car wash where wastewater is treated and recycled. If washed at home, cars will be washed on gravel or grass with biodegradable soap.		
b.	Maintain cars with regular tune-ups and fix fluid leaks.		
c.	Use ground cloths and/or drip pans under the car when working on it at home.		
d.	Properly dispose of used antifreeze by taking it to a local auto service center.		
e.	Properly dispose of used motor oil by taking it to the Fitchburg Recycling Dropoff Site at 2373 S. Fish Hatchery Road.		
f.	Reduce the number of car trips I take by consolidating errands, carpooling, walking, using public transportation, or riding my bike.		
g.	Consider purchasing a more fuel efficient vehicle, or other method of transportation, when it's time to replace my current vehicle(s).		
	a. b. c. d. e.		

#### 7. Runoff and Stormwater

In the natural world, soil acts like a sponge, filtering out impurities and slowly releasing it into the groundwater and adjacent surface waters. This important function not only helps clean stormwater, but it also regulates flow by absorbing rainwater during storms and releasing it slowly into the groundwater and adjacent surface waters over time. Hard surfaces such as roadways, parking lots, and rooftops increase runoff that contributes to flooding and water pollution. Porous surfaces, such as natural landscapes, pervious pavement, and open-graded gravel, slowly absorb pollutants and reduce runoff.

In rural areas, agricultural and forest practices can affect runoff. Where runoff drains a freshly-plowed field or clear-cut area, it carries sediment to nearby waterways. Runoff may also carry pesticides and fertilizers that have been applied to the land. Buffers along the banks of creeks and water bodies provide the initial filtering of sediments and other pollutants from runoff.

Most roadside ditches do not drain into a wastewater treatment facility; they carry runoff, along with any pollutants, directly to creeks and other water bodies. The combination of cars, homes, people, and animals in the watershed makes pollution from stormwater a serious threat to water quality.

I pledge to:

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6	a.	Minimize or reduce paved or non-porous surfaces when planning to build or remodel.		
ŀ	b.	Use paving alternatives such as spaced paving stones, bricks, sand, or open-graded gravel.		
	C.	Position rain gutters so they drain rainwater onto grass or garden beds and away from hard surfaces such as asphalt or concrete.		
	d.	Never dump motor oil, antifreeze, pesticides, or any toxic materials down storm drains or on the ground.		
•	e.	Create natural filters by planting buffers of native vegetation along any natural waterway on my property.		
ſ	f.	Work with Public Works staff on establishing and maintaining an "Adopt-A-BMP (Best Management Practice)" program where property owners engage in the inspection and maintenance of public and private stormwater facilities.		
	g.	Assist with local and state surface water monitoring activities. Check <a href="http://watermonitoring.uwex.edu/wav/">http://watermonitoring.uwex.edu/wav/</a> and <a href="http://dnr.wi.gov/topic/surfacewater/monitoring.html">http://dnr.wi.gov/topic/surfacewater/monitoring.html</a> for more information.		

Check out Fitchburg's stormwater web page at <a href="http://www.fitchburgwi.gov/stormwater">http://www.fitchburgwi.gov/stormwater</a> for more information.

#### 8. Fish and Aquatic Life

Trees, shrubs, and other native vegetation along stream banks provide habitat, food and spawning grounds for fish and other aquatic life. Cooler, shaded streams have less algae and are able to hold more dissolved oxygen. Streamside vegetation shields creeks and other water bodies from summer and winter temperature extremes that may be fatal to fish, insects, and aquatic life.

Check <a href="http://dnr.wi.gov/topic/shorelandzoning/research/shorelandbuffers.html">http://dnr.wi.gov/topic/shorelandzoning/research/shorelandbuffers.html</a> for more information on shoreland buffers and how they help to promote good fish and aquatic habitat.

Wetlands protect water quality by trapping sediments and retaining excess nutrients and other pollutants, such as heavy metals. Wetland plants also help prevent stream bank erosion. You can help fish survive by landscaping with native plants, preserving or establishing buffers of trees and shrubs along your creek, and reducing your use of pesticides.

Gathering information about a water body's health can lead to a better understanding about how best to preserve and/or restore the water body. One effective way of doing this is by establishing a citizen-base water monitoring program. The Rock River Coalition and the Upper Sugar River Watershed Association are 2 local watershed groups that Fitchburg residents can consider joining. Check out: <a href="http://www.rockrivercoalition.org/documents/RRCfall2007.pdf">http://www.rockrivercoalition.org/documents/RRCfall2007.pdf</a> and <a href="http://usrwa.org/citizen-based-stream-monitoring/">http://usrwa.org/citizen-based-stream-monitoring/</a> for more information on monitoring efforts for both of these organizations.

## I pledge to:

a. Work to construct vegetated buffers along creeks, wetlands, and other water bodies.
b. Keep all trash and debris, including yard waste, away from creeks, wetlands, and other water bodies.
c. Assist with establishing and maintaining a citizen-based water monitoring program within the City of Fitchburg. Further information can be found at: <a href="http://watermonitoring.uwex.edu/level2/stream.html">http://watermonitoring.uwex.edu/level2/stream.html</a>

## 9. Urban Forestry

According to the USDA Forest Service, planting trees improves water quality and reduces runoff and erosion. During rain events, trees capture and hold water in their canopy and then release it later in to the atmosphere by evapotranspiration. Higher canopy interception results in less surface water runoff. Where rain falls on paved surfaces, a much greater amount of runoff is generated compared to runoff from the same storm falling over a forested area. These large volumes of water are swiftly carried to our local streams, lakes, wetlands and rivers and can cause flooding and erosion, and wash away important animal habitats. In addition, tree roots and leaf litter create soil conditions that promote the infiltration of rainwater into the soil. This helps to replenish our groundwater supply and maintain streamflow during dry periods. Visit http://www.arborday.org/trees/stormwater.cfm to get a better idea of how a city changes when more trees are present.

The benefits of trees are more than just reducing stormwater runoff. Trees around your home can increase its value up to 20% by improving curb appeal. In the summer they provide shade (and save you money on air conditioning bills) and in winter help by providing wind breaks to help lower your heating costs. Trees remove  $CO_2$  from the atmosphere and release oxygen, and they provide a habitat for birds and other small creatures. By properly maintaining existing trees and planting new ones, we can not only protect our creeks and other surface water bodies, but also enjoy all of the other benefits that these plants have to offer.

Trees remove other gaseous pollutants by absorbing them with normal air components through the stomates of the leaf surface.

Some of the other major air pollutants and their primary sources are:

- Sulphur Dioxide (SO2) coal burning for electricity/home heating is responsible for about 60% of the sulphur dioxide in the air. Refining and combustion of petroleum products produce 21% of the SO2.
- Ozone (O3) is a naturally occurring oxidant, existing in the upper atmosphere.
   O3 may be brought to earth by turbulence during severe storms, and small amounts are formed by lightning. Most O3 and another oxidant, peroxyacetylnitrate (PAN) come from the emissions of automobiles and industries, which mix in the air and undergo photochemical reactions in sunlight. High concentration of O3 and PAN often build up where there are many automobiles.
- Nitrogen oxides Automotive exhaust is probably the largest producer of NOx.
   Oxides of nitrogen are also formed by combustion at high temperatures in the presence of two natural components of the air: nitrogen and oxygen.
- Particulates are small (<10microns) particles emitted in smoke from burning fuel, particularly diesel, that enter our lungs and cause respiratory problems. There is up to 60% reduction in street level particulates with trees.

For more information about planting trees in urban areas, visit <a href="http://www.forestsforwatersheds.org/storage/Part3ForestryManual.pdf">http://www.forestsforwatersheds.org/storage/Part3ForestryManual.pdf</a> for the Urban Watershed Forestry Manual's Urban Tree Planting Guide or visit the City's Urban Forestry webpage at

http://www.city.fitchburg.wi.us/departments/cityHall/parksRecreationForestryNaturalRes ources/forestry/ for news and additional resources.

#### I pledge to:

-	r piedge to:			
	a.	Minimize clearing of trees.		
	b.	Preserve established trees, plant new trees when possible, and replace any established trees that are cut down.		
	c.	Plant new trees that encourage diversity and site suitability. Select tree species that are appropriate for the climate and site conditions, including soils and sun exposure. Visit <a href="http://www.arborday.org/shopping/trees/treeWizard/intro.cfm">http://www.arborday.org/shopping/trees/treeWizard/intro.cfm</a> to find a tree that's right for you.		
	d.	Maximize the amount of growing space and understory vegetation around a tree.		
	e.	Provide adequate soil volumes to support trees at maturity. Two cubic feet of soil should be provided for every square foot of mature canopy. Visit <a href="http://www.forestsforwatersheds.org/planting-and-maintaining-trees">http://www.forestsforwatersheds.org/planting-and-maintaining-trees</a> for more planting and maintenance tips.		
	f.	Preserve and improve the soil quality around any trees. Soil should be accessible to air, water and nutrients. Minimize soil compaction, displacement, and erosion.		
	g.	Not over fertilize or over irrigate trees or lawns.		